REMARKS

Favorable reconsideration of this application is requested in view of the following remarks.

The specification has been amended to correct a chemical name of AF-0025 supplied by Daikin Industries, Ltd. beginning at page 8, line 25 (see a copy of Material Property Data of AF-0025 attached hereto) and similarly to correct page 12 further as supported by the discussion of perfluoropropyl vinyl ether at page 7.

Claims 1, 2, and 3 have been canceled without prejudice; claim 4 has been amended as supported by the specification at page 2, lines 6-8 and 14-16, and the results of examples A1 and A2 in table 1 at page 11; and claim 9 has been amended as supported by the specification at page 13, lines 7-10 and results of examples B1–B5 in table 2 at page 24.

Claims 1-3 have been rejected under 35 U.S.C. 102(b) as being anticipated by Felix et al. (U.S. Patent No. 5,589,558). These claims have been canceled. Therefore, the rejection is moot. Applicants do not concede its correctness.

Claims 4-8 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Kodera et al. (U.S. Patent No. 4,014,091) in view of Felix et al. (U.S. Patent No. 5,589,558). Applicants respectfully traverse this rejection.

Applicants assume that Kodera et al. is U.S. Patent No. 4,014,091 in this response instead of U.S. Patent No. 5,589,558 as stated in the Office Action dated February 13, 2008, since this is the same as the number of Felix et al.

Kodera fails to disclose or suggest use of modified polytetrafluoroethylene (PTFE) for a resin film. In addition, Felix does not teach or suggest use of the modified PTFE that improves the charge retention ability of the electret at high temperature such as at least 78 % of retention at 270 °C as claim 4 requires. Instead, Felix discloses that the

modified PTFE of Felix improves dielectric strength and solves a discoloration problem (see coln. 1, lines 43-47 and coln. 3, lines 22-24). Thus, a combination of Kodera and Felix does not lead one to the heat resistant electret that has high charge retention ability at high temperature as claim 4 requires. Nor does the prior art provide a correlation between higher dielectric strength and higher charge retention ability for the modified PTFE film. Therefore, Kodera in view of Felix would not lead those skilled in the art to use the modified PTFE film to provide a heat resistant electret with improved charge retention ability. Moreover, as shown in comparative examples A4, A5, A9, and A10 of Table 1 of the present invention, the modified PTFE film does not inherently provide the high charge retention ability claim 4 requires. Therefore, claim 4 is distinguished from Kodera in view of Felix. Accordingly, the rejection should be withdrawn.

Claims 9-19 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Kodera et al. (U.S. Patent No. 4,014,091) in view of Kang et al. (U.S. Patent No. 6,344,926). Applicants respectfully traverse this rejection.

Applicants again assume Kodera et al. to be U.S. Patent No. 4,014,091 as discussed above.

Having the contact angle on the surface that does not face the metal member be no smaller than 111° as required by claim 9 helps maintain the residual rate of the surface electric potential of the electret. Kodera does not disclose or suggest requirements for the different contact angles of a water droplet on the surfaces of the resin film as claim 9 requires. Kang also fails to disclose or suggest the requirements for different contact angles as claim 9 requires. Accordingly, Kang does not remedy the deficiencies of Kodera.

Having the adhesion-improving treatment only on the surface that faces the metal member as required by claim 14 helps maintain the residual rate of a surface electric potential of the electret. Kodera does not disclose or suggest the adhesion-improving treatment on only the surface facing the metal member as claim 14 requires. Kang discloses a plasma pre-treatment of surfaces of the film to obtain strong adhesion of the metal to the fluoropolymer surface (see coln. 3, lines 56-66). However, Kang suggests

that films receive the plasma pre-treatment on both sides of the fluoropolymer surfaces (see coln. 3, line 56-61 and examples 1-8). Accordingly, Kang does not remedy the deficiencies of Kodera.

Therefore, claims 9 and 14 are distinguished from Kodera in view of Kang, and accordingly, the rejection should be withdrawn.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.

Dated: May 12, 2008

Respectfully submitted,

HAMRE, SCHUMANN, MUELLER & LARSON, P.C.
P.O. Box 2902
Minneapolis, MN 55402-0902
(612) 455-3800

By: _____
Douglas P. Mueller
Reg. No. 30,300

DPM/my/ad

Daikin NEOFLON AF-0025 PFA Film

Categories: Polymer; Thermoplastic; Fluoropolymer; PFA; Polyperfluoroalkoxyethylene, Molded/Extruded; Film

Material Notes: NEOFLON PFA film is a high performance film made from tetrafluoroethylene and perfluoroalkyl vinyl ether (PFA).

Information provided by Daikin Industries.

Vendors: **Click here to view all available suppliers for this material.**

Please click here if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Thickness	25.4 microns	1.00 mil	

Mechanical Properties	Metric	English	Comments
Coefficient of Friction	0.0400 - 0.0600	0.0400 - 0.0600	

Electrical Properties	Metric	English	Comments
Dielectric Constant	1.92 - 2.12	1.92 - 2.12	at 1 kHz and 1 MHz; ASTM D150
Dissipation Factor	0.000100 - 0.000210	0.000100 - 0.000210	

Thermal Properties	Metric	English	Comments
Flammability, UL94	V-0	V-0	
Oxygen Index	>= 95.0 %	>= 95.0 %	

Descriptive Properties	
Roll Length	200 m
Roll Weight	12.5 kg
Roll Width	1150 mm

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